

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An adaptor for use with a urinary catheter having a urine lumen extending between a bladder end and a discharge end, a normally closed valve associated with said urine lumen and having a downstream side communicating with said discharge end, the adaptor for holding the valve in an open state comprising:

a fluid tube sized to sealingly engage said discharge end of said urinary catheter in fluid communication with said downstream side of said valve, and an internal diameter sized for urine to flow therethrough;

a member associated with the fluid tube and having an external dimension sized to allow urine to flow therearound so as to flow [[and]] into the fluid tube, the member adapted to engage said valve from said downstream side thereof when the fluid tube is in sealing engagement with said discharge end and to hold said valve open while the fluid tube is sealingly engaged with said discharge end such that urine is to pass through said valve and through the fluid tube; and

a releasable clip including a portion being movable relative to the fluid tube, the clip being configured to selectively secure the fluid tube in said sealing engagement with said discharge end with movement of the movable clip portion relative to the fluid tube.

2. (Original) The adaptor of claim 1, wherein said discharge end of said urinary catheter is tubular and extends downstream from said valve, the fluid tube of the adaptor being sized to engage within said tubular discharge end to thereby sealingly engage therewith.
3. (Previously Presented) The adaptor of claim 1, the movable clip portion including an arm.
4. (Previously Presented) The adaptor of claim 1, wherein the releasable clip includes a region adapted to pinch a portion of said tubular discharge end between the releasable clip and a portion of the fluid tube engaged within said tubular discharge end.
5. (Original) The adaptor of claim 4, wherein a part of the region, which is in contact with said tubular discharge end, has a contour substantially similar to a contour of said tubular discharge end.
6. (Original) The adaptor of claim 1, the member being rod-shaped.
7. (Original) The adaptor of claim 1, the member being solid in cross-section.
8. (Original) The adaptor of claim 1, the member being hollow in cross-section such that urine also flows therethrough.

9. (Previously Presented) The adaptor of claim 1, the movable clip portion including a rib.

10. (Previously Presented) The adaptor of claim 1, wherein the releasable clip further includes:

a first portion adapted to selectively urge an inner surface of said discharge end against the fluid tube.

11. (Currently Amended) An adaptor for use with a urinary catheter having a urine lumen extending between a bladder end and a discharge end, a normally closed valve associated with said urine lumen and having a downstream side communicating with said discharge end, the adaptor for holding the valve in an open state comprising:

a fluid tube sized to sealingly engage said discharge end of said urinary catheter in fluid communication with said downstream side of said valve, and an internal diameter sized for urine to flow therethrough;

a member associated with the fluid tube and having an external dimension sized to allow urine to flow therearound so as to flow [[and]] into the fluid tube, the member adapted to engage said valve from said downstream side thereof when the fluid tube is in sealing engagement with said discharge end and to hold said valve open while the fluid tube is sealingly engaged with said discharge end such that urine is to pass through said valve and through the fluid tube; and

a releasable clip adapted to selectively secure the fluid tube in said sealing engagement with said discharge end, wherein the releasable clip includes:

a first portion adapted to selectively urge an inner surface of said discharge end against the fluid tube;

a first resilient arm and a second resilient arm with the fluid tube disposed therebetween; and

a flange on the first resilient arm adapted to releasably lock with a detent on the second resilient arm when the arms are urged towards one another.

12. (Previously Presented) The adaptor of claim 11, wherein:

the first resilient arm includes a first pinch rib adapted to selectively urge a first region of said discharge end against the fluid tube; and

the second resilient arm includes a second pinch rib adapted to selectively urge a second region of said discharge end against the fluid tube.

13. (Previously Presented) The adaptor of claim 11, wherein:

the first resilient arm includes a safety rib adapted to prevent the first resilient arm from being urged against the fluid tube more than a predetermined amount.

14. (Original) The adaptor of claim 1, further comprising:

a protuberance positioned to butt up against a portion of said urinary catheter when the member engages said downstream side of said valve thereby preventing the member from being further inserted into said valve.

15. (Previously Presented) The adaptor of claim 14, wherein:

the protuberance is located on the releasable clip.

16. (Original) The adaptor of claim 1, wherein the member is sized to pass through said valve.

17. (Original) The adaptor of claim 1, wherein the member extends beyond the fluid tube.

18. (Currently Amended) An adaptor for use with a urinary catheter having a urine lumen extending between a bladder end and a discharge end, a normally closed valve associated with said urine lumen and having a downstream side communicating with said discharge end, the adaptor for holding the valve in an open state comprising:

a fluid tube sized to sealingly engage said discharge end of said urinary catheter in fluid communication with said downstream side of said valve, and an internal diameter sized for urine to flow therethrough;

a member extending beyond the fluid tube and having an external dimension sized to allow urine to flow therearound so as to flow [[and]] into the fluid tube, the member adapted to engage said valve from said downstream side thereof when the fluid tube is in sealing engagement with said discharge end and to hold said valve open while the fluid tube is sealingly engaged with said discharge end such that urine is to pass through said valve and through the fluid tube; and

a releasable clip including a portion being movable relative to the fluid tube, the clip being configured to selectively secure the fluid tube in said sealing engagement with said discharge end with movement of the movable clip portion relative to the fluid tube.

19. (Original) The adaptor of claim 18, wherein said discharge end of said urinary catheter is tubular and extends downstream from said valve, the fluid tube of the adaptor being sized to engage within said tubular discharge end to thereby sealingly engage therewith.

20. (Previously Presented) The adaptor of claim 19, the movable clip portion including an arm.

21. (Previously Presented) The adaptor of claim 18, wherein the releasable clip includes a region adapted to pinch a portion of said tubular discharge end between the releasable clip and a portion of the fluid tube engaged within said tubular discharge end.

22. (Original) The adaptor of claim 21, wherein a part of the region, which is in contact with said tubular discharge end, has a contour substantially similar to a contour of said tubular discharge end.

23. (Original) The adaptor of claim 18, the member being rod-shaped.

24. (Original) The adaptor of claim 18, the member being solid in cross-section.

25. (Original) The adaptor of claim 18, the member being hollow in cross-section such that urine also flows therethrough.

26. (Previously Presented) The adaptor of claim 18, the movable clip portion including a rib.

27. (Previously Presented) The adaptor of claim 18, wherein the releasable clip further includes:

a first portion adapted to selectively urge an inner surface of said discharge end against the fluid tube.

28. (Currently Amended) An adaptor for use with a urinary catheter having a urine lumen extending between a bladder end and a discharge end, a normally closed valve associated with said urine lumen and having a downstream side communicating with said discharge end, the adaptor for holding the valve in an open state comprising:

a fluid tube sized to sealingly engage said discharge end of said urinary catheter in fluid communication with said downstream side of said valve, and an internal diameter sized for urine to flow therethrough;

a member extending beyond the fluid tube and having an external dimension sized to allow urine to flow therearound so as to flow [[and]] into the fluid tube, the member adapted to

engage said valve from said downstream side thereof when the fluid tube is in sealing engagement with said discharge end and to hold said valve open while the fluid tube is sealingly engaged with said discharge end such that urine is to pass through said valve and through the fluid tube; and

a releasable clip adapted to selectively secure the fluid tube in said sealing engagement with said discharge end, wherein the releasable clip includes:

a first portion adapted to selectively urge an inner surface of said discharge end against the fluid tube;

a first resilient arm and a second resilient arm with the fluid tube disposed therebetween; and

a flange on the first resilient arm adapted to releasably lock with a detent on the second resilient arm, when the arms are urged towards one another.

29. (Previously Presented) The adaptor of claim 28, wherein:

the first resilient arm includes a first pinch rib adapted to selectively urge a first region of said discharge end against the fluid tube; and

the second resilient arm includes a second pinch rib adapted to urge a second region of said discharge end against the fluid tube.

30. (Previously Presented) The adaptor of claim 28, wherein:

the first resilient arm includes a safety rib adapted to prevent the first resilient arm from being urged against the fluid tube more than a predetermined amount.

31. (Previously Presented) The adaptor of claim 26, further comprising:

a protuberance positioned to butt up against a portion of said urinary catheter when the member engages said downstream side of said valve thereby preventing the member from being further inserted into said valve.

32. (Previously Presented) The adaptor of claim 31, wherein:

the protuberance is located on the releasable clip.

33. (Original) The adaptor of claim 18, wherein said member is sized to pass through said valve.

34. (Currently Amended) An adaptor for use with a fluid catheter having a lumen extending between an upstream end and a downstream end, a normally closed valve associated with said fluid lumen and having a downstream side communicating with said downstream end, the adaptor for holding the valve in an open state comprising:

a fluid tube sized to sealingly engage said downstream end of said fluid catheter in fluid communication with said downstream side of said valve, and an internal diameter sized for fluid to flow therethrough;

a member associated with the fluid tube and having an external dimension sized to allow fluid to flow therearound so as to flow [[and]] into the fluid tube, the member adapted to engage said valve from said downstream side thereof when the fluid tube is in sealing engagement with said downstream end and to hold said valve open while the fluid tube is sealingly engaged with said downstream end such that fluid is to pass through said valve and through the fluid tube; and

a releasable clip including a portion being movable relative to the fluid tube, the clip being configured to selectively secure the fluid tube in said sealing engagement with said downstream end with movement of the movable clip portion relative to the fluid tube.

35. (Original) The adaptor of claim 34, wherein said downstream end of said fluid catheter is tubular and extends downstream from said valve, the fluid tube of the adaptor being sized to engage within said tubular downstream end to thereby sealingly engage therewith.

36. (Original) The adaptor of claim 34, the member being solid in cross-section.

37. (Original) The adaptor of claim 34, the member being hollow in cross-section such that fluid also flows therethrough.

38. (Previously Presented) The adaptor of claim 34, the movable clip portion including an arm.

39. (Original) The adaptor of claim 34, further comprising:

a protuberance positioned to butt up against a portion of said fluid catheter when the member engages said downstream side of said valve thereby preventing the member from being further inserted into said valve.

40. (Original) The adaptor of claim 34, wherein the member is sized to pass through said valve.

41. (Original) The adaptor of claim 34, wherein the member extends beyond the fluid tube.

42. (Currently Amended) An adaptor for use with a fluid catheter having a lumen extending between an upstream end and a downstream end, a normally closed valve associated with said fluid lumen and having a downstream side communicating with said downstream end, the adaptor for holding the valve in an open state comprising:

a fluid tube sized to sealingly engage said downstream end of said fluid catheter in fluid communication with said downstream side of said valve, and an internal diameter sized for fluid to flow therethrough;

a member extending beyond the fluid tube and having an external dimension sized to allow fluid to flow therearound so as to flow [[and]] into the fluid tube, the member adapted to engage said valve from said downstream side thereof when the fluid tube is in sealing engagement with said downstream end and to hold said valve open while the fluid tube is

sealingly engaged with said downstream end such that fluid is to pass through said valve and through the fluid tube; and

a releasable clip including a portion being movable relative to the fluid tube, the clip being configured to selectively secure the fluid tube in said sealing engagement with said downstream end with movement of the movable clip portion relative to the fluid tube.

43. (Original) The adaptor of claim 42, wherein said downstream end of said fluid catheter is tubular and extends downstream from said valve, the fluid tube of the adaptor being sized to engage within said tubular downstream end to thereby sealingly engage therewith.

44. (Original) The adaptor of claim 42, the member being solid in cross-section.

45. (Original) The adaptor of claim 42, the member being hollow in cross-section such that fluid also flows therethrough.

46. (Previously Presented) The adaptor of claim 42, the movable clip portion including an arm.

47. (Original) The adaptor of claim 42, further comprising:

a protuberance positioned to butt up against a portion of said fluid catheter when the member engages said downstream side of said valve thereby preventing the member from being further inserted into said valve.

48. (Original) The adaptor of claim 42, wherein the member is sized to pass through said valve.

49. (Currently Amended) An adaptor for use with a urinary catheter having a urine lumen extending between a bladder end and a discharge end, a normally-closed valve associated with said urine lumen and having a downstream side communicating with said discharge end, the adaptor for holding the valve in an open state comprising:

a rigid fluid tube sized to sealingly engage said discharge end of said urinary catheter for urine flow therethrough; and

a releasable clip external to the fluid tube and including a portion movable relative to the fluid tube, the clip being configured to selectively secure the fluid tube in said sealing engagement with said discharge end with movement of the movable clip portion relative to the fluid tube, the fluid tube projecting through an aperture of the releasable clip spaced from a peripheral edge of the aperture.

50. (Original) The adaptor of claim 49, wherein the releasable clip further includes:

a first portion adapted to selectively urge a portion of the discharge end against the fluid tube.

51. (Currently Amended). An adaptor for use with a urinary catheter having a urine lumen extending between a bladder end and a discharge end, a normally-closed valve associated with said urine lumen and having a downstream side communicating with said discharge end, the adaptor for holding the valve in an open state comprising:

a rigid fluid tube sized to sealingly engage said discharge end of said urinary catheter for urine flow therethrough; and

a releasable clip external to the fluid tube adapted to selectively secure the fluid tube in said sealing engagement with said discharge end, wherein said releasable clip includes:

a first portion adapted to selectively urge a portion of the discharge end against the fluid tube;

a first resilient arm and a second resilient arm with the fluid tube disposed therebetween; and

a flange on the first resilient arm adapted to releasably lock with a detent on the second resilient arm, when the arms are urged towards one another.

52. (Previously Presented) The adaptor of claim 51, wherein:

the first resilient arm includes a first pinch rib adapted to selectively urge a first region of said discharge end against the fluid tube; and

the second resilient arm includes a second pinch rib adapted to selectively urge a second region of said discharge end against the fluid tube.

53. (Original) The adaptor of claim 49, wherein the adaptor further includes:

a member having an external dimension sized to allow urine to flow therearound and into the fluid tube, the member adapted to engage said downstream side of said valve when the fluid tube is in sealing engagement with said discharge end and hold said valve open by internal actuation while the fluid tube is sealingly engaged with said discharge end such that urine is to pass through said valve and through the fluid tube.

54. (Original) The adaptor of claim 53, wherein the releasable clip further includes:

a protuberance positioned to butt up against a portion of said urinary catheter when the member engages said downstream side of said valve thereby preventing the member from being further inserted into said valve.

55. (Original) The adaptor of claim 49, wherein the fluid tube has an external diameter sized to fit within said discharge end of said urinary catheter in fluid communication with said downstream side of said valve, and an internal diameter sized for urine to flow therethrough.

56. (Currently Amended) An adaptor comprising:

a fluid tube, the fluid tube having a downstream end and an upstream end;

a rigid valve opening member associated with, and held in fixed spatial relationship to, the fluid tube; and

a clip fixedly coupled with the fluid tube; the clip having a first resilient arm with a first opening through which the valve opening member extends, and a second resilient arm with a second opening accommodating said downstream end, and the first resilient arm and the second resilient arm positioned with the fluid tube disposed therebetween.

57. (Previously Presented) The adaptor of claim 56 further comprising a safety rib on the second resilient arm and extending towards the fluid tube, the safety rib being adapted to prevent the second resilient arm from being urged against the fluid tube more than a predetermined amount.

58. (Previously Presented) The adaptor of claim 56 further comprising a resilient rib on one of the resilient arms and extending towards the fluid tube, the resilient rib being adapted to communicate with the fluid tube when the clip is in a closed position.

59. (Original) The adaptor of claim 58, the resilient rib being disposed at an angle.

60. (Original) The adaptor of claim 56, wherein the valve opening member extends beyond the fluid tube upstream therefrom.

61. (Currently Amended) An adaptor comprising:

a fluid tube, the fluid tube having a downstream end and an upstream end;

a rigid valve opening member extending beyond, and held in fixed spatial relationship to, the fluid tube upstream therefrom; and

a clip fixedly coupled with the fluid tube; the clip having a first resilient arm with a first opening through which the valve opening member extends, and a second resilient arm with a second opening accommodating said downstream end, and the first resilient arm and the second resilient arm positioned with the fluid tube disposed therebetween.

62. (Previously Presented) The adaptor of claim 61 further comprising a safety rib on the second resilient arm and extending towards the fluid tube, the safety rib being adapted to prevent the second resilient arm from being urged against the fluid tube more than a predetermined amount.

63. (Previously Presented) The adaptor of claim 61 further comprising a resilient rib on one of the resilient arms and extending towards the fluid tube, the resilient rib being adapted to communicate with the fluid tube when the clip is in a closed position.

64. (Original) The adaptor of claim 63, the resilient rib being disposed at an angle.

65. (Currently Amended) A catheter arrangement comprising:

a catheter comprising a fluid lumen extending between an upstream end and a downstream end, a normally-closed valve associated with said fluid lumen and having a downstream side in communication with said downstream end, and

an adaptor, comprising:

a fluid tube sized to sealingly engage the downstream end of the catheter in fluid communication with the downstream side of the valve for fluid to flow therethrough;

a member associated with the fluid tube and having an external dimension sized to allow fluid to flow therearound so as to flow [[and]] into the fluid tube, the member adapted to engage the valve from the downstream side thereof when the fluid tube is in sealing engagement with the downstream end of the catheter and to hold the valve open while the fluid tube is sealingly engaged with the downstream end such that fluid is to pass through the valve and through the fluid tube; and

a releasable clip including a portion being movable relative to the fluid tube, the clip being configured to selectively secure the fluid tube in said sealing engagement with said downstream end with movement of the movable clip portion relative to the fluid tube.

66. (Original) The arrangement according to claim 65, wherein the valve includes a duck-bill valve.

67. (Original) The arrangement according to claim 66, wherein the member further includes:

a rod having a major axis substantially aligned with a major axis of the downstream end of the fluid lumen and is positioned within the duck-bill valve, when the member engages the valve, so as to form a respective open region on each side of the rod bounded by the duck-bill valve.

68. (Original) The arrangement according to claim 67, wherein a combined cross-sectional area of the respective open regions is larger than a cross-sectional area of the rod.

69. (Original) The arrangement according to claim 67, wherein the rod comprises a hollow central region along its major axis whereby fluid flows out of the catheter through the hollow central region.

70. (Original) The arrangement according to claim 65, wherein the member extends upstream beyond the fluid tube.

71. (Currently Amended) A catheter arrangement comprising:

a catheter comprising a fluid lumen extending between an upstream end and a downstream end, a normally-closed valve associated with said fluid lumen and having a downstream side in communication with said downstream end, and

an adaptor, comprising:

a fluid tube sized to sealingly engage the downstream end of the catheter in fluid communication with the downstream side of the valve for fluid to flow therethrough;

a member extending beyond the fluid tube upstream therefrom and having an external dimension sized to allow fluid to flow therearound so as to flow [[and]] into the fluid tube, the member adapted to engage the valve from the downstream side thereof when the fluid tube is in sealing engagement with the downstream end of the catheter and to hold the valve open while the fluid tube is sealingly engaged with the downstream end such that fluid is to pass through the valve and through the fluid tube; and

a releasable clip including a portion being movable relative to the fluid tube, the clip being configured to selectively secure the fluid tube in said sealing engagement with said downstream end with movement of the movable clip portion relative to the fluid tube.

72. (Original) The arrangement according to claim 70, wherein the valve includes a duck-bill valve.

73. (Original) The arrangement according to claim 72, wherein the member further includes:

a rod having a major axis substantially aligned with a major axis of the downstream end of the fluid lumen and is positioned within the duck-bill valve, when the member engages the valve, so as to form a respective open region on each side of the rod bounded by the duck-bill valve.

74. (Original) The arrangement according to claim 73, wherein a combined cross-sectional area of the respective open regions is larger than a cross-sectional area of the rod.

75. (Original) The arrangement according to claim 73, wherein the rod comprises a hollow central region along its major axis whereby fluid flows out of the catheter through the hollow central region.

76 - 86. (Cancelled)

87. (Previously Presented) The adaptor of claim 34, the movable clip portion including a rib.

88. (Previously Presented) The adaptor of claim 42, the movable clip portion including a rib.

89. (Previously Presented) The adaptor of claim 1, the movable clip portion being configured to engage the discharge end.

90. (Previously Presented) The adaptor of claim 18, the movable clip portion being configured to engage the discharge end.

91. (Previously Presented) The adaptor of claim 34, the movable clip portion being configured to engage the downstream end.

92. (Previously Presented) The adaptor of claim 42, the movable clip portion being configured to engage the downstream end.

93. (Previously Presented) The adaptor of claim 48, the movable clip portion being configured to engage the discharge end.

94. (Previously Presented) The adaptor of claim 65, the movable clip portion being configured to engage the downstream end.

95. (Previously Presented) The adaptor of claim 71, the movable clip portion being configured to engage the downstream end.